

**Notice of Allowability**

Application No.

09/810,463

Examiner

Andrew Schechter

Applicant(s)

KUBO ET AL.

Art Unit

2871

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the filing of 15 September 2003.
2. ☒ The allowed claim(s) is/are 2-19, 21-25 and 27-30.
3. ☒ The drawings filed on 19 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.  
(b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.  
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- 1 ☐ Notice of References Cited (PTO-892)  
3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
5 ☐ Information Disclosure Statements (PTO-1449), Paper No. \_\_\_\_\_.  
7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)  
4 ☐ Interview Summary (PTO-413), Paper No. \_\_\_\_\_.  
6 ☐ Examiner's Amendment/Comment  
8 ☒ Examiner's Statement of Reasons for Allowance  
9 ☐ Other

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 2-19, 21-25, and 27-30 allowed.
2. The following is an examiner's statement of reasons for allowance:

*Nishiki* discloses, in embodiments having the necessary connection line, that the transparent electrode is above the reflective one, so claim 2 is not anticipated by *Nishiki*. In particular, Fig. 5 [in which elements 4 and 11 are the same] discloses the reflection electrode above the transparent one, but the connection from the switching element to the second sub-pixel (the reflection electrode) is the direct contact between the first and second sub-pixels, not via a connection line. U.S. Patent No. 6,195,140 to *Kubo et al.* is a patent which relies on *Nishiki* for foreign priority. Its Fig. 14 is essentially the same as *Nishiki's* Fig. 7. *Kubo's* Figs. 32-33 show the reflection sub-pixel electrode overlapping the transparent sub-pixel electrode via a Mo layer [214]. It is the interpretation of the examiner that this layer does not constitute a "connection line" in the sense of claims 2 and 10 (essentially because it extends as a "line" parallel to the juncture instead of in the direction across the juncture). Claim 2 is therefore allowed, as are its dependent claims 3-9.

Neither *Nishiki* nor *Kubo* disclose the method of cutting the connection line to disconnect the second sub-pixel in the event of a short, as recited in claim 10. U.S. Patent No. 5,977,563 to *Kubo et al.*, made of record by the applicant, discloses the basic technique of correcting for defects, when pixel electrodes short to each other, by

cutting connection lines to the pixel electrodes. However, it does not disclose sub-pixels of different heights with the particular connection line recited in claims 2 and 10. Claim 10 and its dependent claims 11-19 are therefore allowed.

The prior art similarly does not disclose the additional limitation of the new claim 22, that (in the context of the device with first and second sub-pixels at different distances to the counter electrode, a feature which *Ha* does not have) there is a defect correction region of the connection line which is not overlaid by the second sub-pixel electrode. Claims 22 and 29 are therefore allowed, as are their dependent claims 23-25 and 30.

The connection line 114a in *Ha* (and similarly in *Nishiki*) is not designed to be cut for defect correction, so the second region's smaller width is not smaller "to facilitate cutting of the second region for defect correction", so claims 21 and 27 are allowed, as is dependent claim 28.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (703) 306-5801. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AS  
Andrew Schechter  
8 October 2003

JOAN TON  
PRIMARY EXAMINER